

Remarks of FCC Commissioner Mignon L. Clyburn (as prepared)
WIA Wireless Infrastructure Show
Orlando, Florida
May 24, 2017

Closing the Skills Gap:
Preparing our Workforce for the Jobs of Tomorrow

Good morning. First, let me thank Amelia DeJesus for that gracious introduction, and express to Jonathan Adelstein and the distinguished members of the Wireless Infrastructure Association how honored I am to take part in this year's Infrastructure Show. This morning, I would like to focus my remarks on a topic that is very important to me as well as the members of WIA: ensuring that our workforce has the skills necessary for the jobs of today, the opportunities to successfully compete for the jobs of tomorrow, and more clearly reflects the great diversity of our country.

During my nearly eight years as an FCC Commissioner, I have had the opportunity to travel throughout the United States, and meet with entrepreneurs, executives, students, educators, health care professionals, and others from many walks of life. It may or may not surprise you that there is one theme that resonates throughout all of these meetings: the importance of broadband access and its affordability.

I know in many respects I am preaching to the choir, since this crowd is intimately familiar with the importance of broadband, but that fact cannot be overemphasized. Without access to affordable broadband, our communities suffer: our children cannot do their homework, our unemployed cannot apply for jobs, the infirm may not receive timely care, and our budding entrepreneurs cannot stay competitive.

So as far as I am concerned – broadband is where we must all start. To have an educated, competitive workforce in this century and beyond, we must ensure that everyone in our communities truly has access to broadband service, for all of the infrastructure builds in the world will not enable access if the service is not affordable. This is why we must support and strengthen programs such as Lifeline, the Rural Healthcare Fund, and E-rate, that bring affordable connectivity to those in our communities who most need it. I fought hard to modernize the Lifeline program last year, and continue to fight to ensure the program fulfills its intended purpose.

Now I recognize that I am in mixed company here, but I would be remiss if I did not say that affordable access to an *open* internet is paramount. An open internet is good for consumers, it is good for business, and it is good for our country. There should not be internet fast lanes reserved for the few who are willing and able to pay, nor preferences shown to those with business relationships with a provider.

And the *2015 Open Internet Order* reflects a long standing commitment shared by millions of Americans to protect a platform that inspires innovation and entrepreneurship, fosters freedom of speech and expression, and stimulates incentives for investment. Here, too, I am determined to do everything in my power to ensure the internet remains the preeminent engine of innovation and opportunities for our communities.

So, we have established the importance of ubiquitous and affordable broadband coverage that is unhindered by anti-competitive and anti-consumer schemes. Next, we need to ensure, that our workforce is prepared for the jobs of today and beyond. There is one fact that we cannot help but face here: most, if not all jobs of the future, will be infused with elements of technology, and yes, more and more jobs, will be taken over by computers and robots. While this means that the jobs of today will look radically different in the coming decades, that does not have to mean rampant unemployment.

We must look at this as an opportunity to re-educate and retool students and workers by offering them innovative learning opportunities. And while all agree that STEM or STEAM education is critical, equally important, I submit, are the abilities to think critically and communicate effectively. We have only vague ideas of what skill sets will be necessary in the next 20 years or so, but if we teach our students from an early age to be critical thinkers and inquisitive life learners they will be able to adapt to the needs of the future job market.

Essential as well, is building public-private partnerships to provide communities the skills they need to staff jobs. These partnerships can take many forms, including those between businesses and K-12 schools, community colleges and four year institutions, local communities and state and federal governments. Why not, for example, adopt a local school and donate computers and teaching resources, or provide internship opportunities to students in nearby communities? Why not partner with a local college to develop a curriculum that helps train students in the skills necessary to work in your industry?

The Pathways in Technology Early College High Schools or P-TECH, is an excellent example, of the synergies of public-private partnerships that educate our youth for the jobs of the future. P-TECH schools are designed to prepare high school students for future opportunities in technology, manufacturing, healthcare, and finance, and include rigorous, relevant STEM education, mentoring opportunities, visits to companies, and internships. Students graduate from the six-year program with a high school diploma as well as an associate degree at no additional cost to their families. This is capped with a commitment from the participating business partners to recruit students who complete the program.

P-TECH will be in over 100 schools by the end of this year and over 300 companies already participate. Such initiatives directly benefit the bottom line of businesses and bridge the affordability gap that is preventing so many bright but economically strapped students from graduating to a more prosperous tomorrow. For many if not all companies, acquiring and retaining talent is by far the biggest cost, and hiring from a pool of applicants who have an established relationship with the organization, and know the work and culture, quickly translates to reduction in “time to productivity” and increased job satisfaction.

The Virginia Workforce grant program is another noteworthy example. This program enables students at Virginia’s community colleges to participate in 124 different training programs that provide workforce credentials for a third of the price. Working with industry partners, the community colleges developed a list of eligible credentials for over 170 grey-collar jobs, such as electricians, computer network specialists, digital security specialists, and industrial machinery mechanics. These types of jobs require specific skill sets in addition to a high school degree, but not necessarily a college degree, and these jobs are in high demand.

And, of course, I have to acknowledge WIA's contributions to this effort. Just yesterday, Jonathan announced that WIA will launch a Telecommunications Education Center or TEC next month. This new learning program will offer courses that reflect the needs of the wireless industry. Education and training in areas such as Wireless Fundamentals, DAS, Small Cells, Wi-Fi, Macro Cellular Infrastructure as well as 5G and emerging trends will be offered, and TEC will also support apprenticeships in the industry.

Fostering and supporting apprenticeships is an important tool in our efforts, and the federal government has a key role to play here as well. Last year, the prior administration announced that it had awarded over \$50 million in grants to assist states, in implementing programs to support apprenticeships. These programs include Alaska's efforts to create apprenticeship opportunities in health care and aviation, Florida's efforts to address the critical need for skilled and diverse workers in occupation-growth industries, and Guam's plans to increase opportunities for underrepresented workers, in the construction and tourism industries.

Another innovative program, TechHire, was developed under the prior administration, but is now a national movement in its own right. The project is a national network of communities, educators, and employers that aims to expand local technology sectors by building talent pipelines in local communities. Under the original program, the Department of Labor awarded \$150 million in grants, including \$125 million for partnerships that train young people, 17-29 years old, and \$24 million for partnerships that help those in disadvantaged groups facing barriers to employment, including veterans, those with disabilities, and people with criminal records.

In the words of the organization, "TechHire enables employers to fill entry-level, career-path, skilled tech jobs, by hiring trained job seekers with the ability to do the job – but who are overlooked by typical hiring practices and/or underrepresented in the IT field. In its pilot year, TechHire grew to include over 1300 employers, 237 community and training partners, and placed over 4000 people into jobs."

Finally, we must strive to be inclusive in our hiring and retention practices to ensure that our workforce and supply chain, reflect the rich diversity of our communities. This means re-evaluating hiring practices, and casting a wider, more inclusive net, to capture diverse candidates. Programs such as TechHire highlight a growing trend of employers being more pragmatic and recognizing that credentials, not just diplomas, are needed for jobs. This is especially true in underrepresented communities, where there are many impediments to obtaining a four year college degree.

In order to have a more inclusive workforce, companies must rework the evaluation matrix to incorporate those who may have stubbed their toes along the way, such as those with a legal blemish on their records. Many of those who are incarcerated are entrepreneurial – unfortunately, they did not have the opportunities in their neighborhoods to utilize their skills in a positive way.

We can all play a role in cutting the cradle-to-prison pipeline that is prevalent in so many of our communities – and providing the primary breadwinner a way to support his or her family is one important way that this can be achieved. Affordable inmate calling services rates is another, but that is a topic for another day.

We all have biases – instead of ignoring or denying them, we need to ensure that they do not short circuit someone who has the potential to be an asset to your company. And once hired, companies must be proactive in implementing mentorships and other programs, that provide support to new employees from underrepresented groups. Successful companies recognize that it requires a prolonged, systematic process to have a more diverse company and workforce – in other words, a top-down approach and buy-in from all levels of management in order for everyone to succeed.

This is just as true when it comes to ensuring supply chain diversity – it takes an ongoing commitment to make that a reality. I applaud WIA, for its documented and sustained commitment to promoting, encouraging, and supporting supplier diversity. And I am honored to kick off WIA's 2017 Supplier Diversity Summit which promises to be an informative and unparalleled opportunity for small, minority, and women-owned companies, to engage with the experts and decision makers from major wireless companies.

The Commission's Office of Communications and Business Opportunities, or OCBO, has also played an important role when it comes to promoting supply chain diversity over the last several years. OCBO has held several workshops to connect small businesses and entrepreneurs with financial experts, has developed tools to assist entities with obtaining investment capital, and has created online networking programs to connect these entities with other businesses.

OCBO has also worked with the Small Business Administration to enhance the abilities of small business to thrive in an increasingly competitive environment, and is exploring ways to advise small businesses about best practices when it comes to cyber security, as well as teaching small businesses how to increase their digital literacy and e-commerce skills. OCBO is a valuable resource for entrepreneurs seeking to enter the communications market, and I hope that it will continue to be so, in the years to come. You will hear more about the work of OCBO during the Diversity and Inclusion Panel that is taking place later this morning.

We must all play a role in producing, educating, and training the next generation of American workers. We cannot afford to ignore the reality that the very technologies that make our lives more efficient and connected have irrevocably altered the job and opportunities landscape. This does not mean rejecting innovation or slowing it down, it means finding the ancillary opportunities for the automated and computerized jobs, ensuring our students and workers have the requisite STEM and critical thinking skills to adapt to the workplace demands of the future, and ensuring our workforce reflects the rich diversity of our great nation.

So while we have a lot of demands that face us going forward, we have shown time and time again that we have the means to adapt, the capacity to adjust and the tenacity to get the job done, so let's continue to work, and make it happen. Thank you and I welcome any questions you have.